

Claims

1. A washing and drying machine, comprising:
a water tank (2);
5 a rotary drum (3) rotatably supported in said water tank (2);
irradiating means (21) for emitting a light beam including ultra-violet ray into
said rotary drum (3); and
control means for controlling said irradiating means (21) such that the light beam
including ultra-violet ray is emitted into said rotary drum (3) after the end of drying
10 process.
2. The washing and drying machine according to claim 1, wherein
said control means controls said irradiating means (21) such that only an
irradiating step of emitting the light beam including ultra-violet ray into said rotary drum
15 (3) can be performed.
3. The washing and drying machine according to claim 1, wherein
said control means controls said irradiating means (21) such that an irradiating
step of emitting the light beam including ultra-violet ray into said rotary drum (3) is
20 performed when temperature in said rotary drum (3) is at least 30 °C and at most 60 °C.
4. The washing and drying machine according to claim 1, wherein
said control means controls a door (7) provided to open/close an opening of said
rotary drum (3) such that the door is locked when an irradiating step of emitting the
25 light beam including ultra-violet ray into said rotary drum (3) is performed.
5. The washing and drying machine according to claim 1, wherein
a component contains a ultra-violet ray absorber and is formed to shut off ultra-

violet ray.

6. The washing and drying machine according to claim 1, wherein
said irradiating means (21) is provided on a door (7) provided to open/close an
5 opening of said rotary drum (3).

7. The washing and drying machine according to claim 1, wherein
said irradiating means (21) is provided on said water tank (2) such that the light
beam including ultra-violet ray is emitted to an outer circumferential surface of said
10 rotary drum (3), and a plurality of through holes (32) penetrating to the inside of said
rotary drum (3) are formed in said outer circumferential surface of said rotary drum (3).

8. A washing and drying machine, comprising:
a washing tank (106) accommodating clothes; and
15 irradiating means (103) for emitting a light beam not including ultra-violet ray
into said washing tank.

9. The washing and drying machine according to claim 8, wherein
said irradiating means (103) includes
20 a light source (101) emitting a light beam having a wavelength of at least 400 nm.

10. The washing and drying machine according to claim 9, wherein
said light source (103) is a halogen lamp.

11. The washing and drying machine according to claim 8, wherein
said irradiating means (103) includes
a light source (101); and
25 ultra-violet ray shutting means (103A) for shutting off the ultra-violet ray.

12. The washing and drying machine according to claim 11, wherein said light source (101) is a halogen lamp.

5 13. The washing and drying machine according to claim 8, further comprising:
drying means (104) for feeding hot air to said washing tank (106);
temperature detecting means (130) for detecting temperature in said washing
tank (106); and
control means for controlling said irradiating means (103) such that the light
10 beam is emitted when the temperature detected by said temperature detecting means
(130) is at least 40 °C and lower than 70 °C.

14. The washing and drying machine according to claim 13, wherein
said control means control said irradiating means (103) such that
15 clothes in said washing tank (106) is irradiated after the clothes in said washing
tank (106) are dried by said drying means (104).

15. The washing and drying machine according to claim 8, further comprising
door lock means (140) for locking closed a door (113) provided at an inlet for
20 inputting clothes into said washing tank (106); wherein
said control means activates said door lock means (140) while the light beam is
emitted by said irradiating means (103).

16. A washing and drying machine capable of performing at least one of
25 washing process and drying process, comprising:
a main body (201);
a water tank (202) provided in said main body (201);
a drum (203) provided in said water tank (202) and accommodating an object of

washing/drying (206);

a motor (204) rotating said drum (203);

a drain path (212) guiding water in said drum (203) to the outside of said main body (201);

5 a door portion (207) on an opening of said drum (203) in said main body (201);
heating means (210) for heating the inside of said drum (203) with said door portion (207) closed;

ultra-violet ray irradiating means (220) for emitting ultra-violet ray to the inside of said drum (203); and

10 a control means (214) controlling said heating means such that temperature in said drum (203) is in a prescribed temperature range when said object of drying (206) is taken out at the end of said drying process.

15 17. The washing and drying machine according to claim 16, wherein said prescribed temperature range is from at least 40 °C to at most 60 °C.

18. The washing and drying machine according to claim 16, wherein said drying process includes the step of ultra-violet ray irradiation by said ultra-violet ray irradiating means (220).

20 19. The washing and drying machine according to claim 16, wherein the ultra-violet ray emitted from said ultra-violet ray irradiating means (220) has a wavelength of at least 280 nm.

25 20. The washing and drying machine according to claim 16, further comprising;
input means for ON/OFF controlling said ultra-violet ray irradiating means (220).

21. The washing and drying machine according to claim 16, wherein
in said drying process, at least a part of the ultra-violet ray irradiating step by
said ultra-violet ray irradiating means (220) and at least a part of the heating process by
said heating means (210) are performed simultaneously.

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22. The washing and drying machine according to claim 16, wherein
a ultra-violet ray absorber absorbing the ultra-violet ray is arranged to surround
said drum (203).

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23. A clothes dryer capable of performing a drying process for drying clothes,
comprising:

a main body (201);

a drum (203) provided in said main body (201) and accommodating an object of
drying (206);

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a motor (204) rotating said drum (203);

a door portion (207) on an opening of said drum (203) in said main body (201);

heating means (210) for heating the inside of said drum (203) with said door
portion (207) closed;

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ultra-violet ray irradiating means (220) for emitting ultra-violet ray to the inside
of said drum (203); and

a control means (214) controlling said heating means such that temperature in
said drum (203) is in a prescribed temperature range when said object of drying (206) is
taken out at the end of said drying process.